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ABSTRACT

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Abstract

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RC 005030

MORALE AND TEACHER SEPARATION AND RETENTION IN BUREAU OF INDIAN AFFAIRS SCHOOLS[1]

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The Bureau of Indian Affairs is one of the nation's largest employers of teachers and faces a substantial teacher retention and recruitment problem since many of its schools are located in quite remote areas. The BIA is charged with the responsibility of providing an education to those Indian children not attending public, private, or mission schools. In order to gain a perspective of the educational task of the BIA one should know that according to the publication, Statistics Concerning Indian Education (1968), 142,630 Indian students, ages 6-18 years, were enrolled in school. This represents 57.4% of the Indian children of school age. Of the 142,630 students, 61.3% attended public schools, 6% attended private and mission schools, and the remaining 32.7% attended federal BIA schools.

In 1968 the BIA operated 226 schools with a total enrollment of 51,596, and 18 dormitories for 4,204 Indian children who attended public schools. The BIA employs about 2,400 professional teachers and 450 administrative and supervisory educational personnel. There are agency schools throughout the country. School enrollments range from 2,100 at Intermountain School in Utah to 10 at the Birney Day School in Montana.

In order to maintain an adequate staff, the Bureau estimates that it has to make 1,000 offers to prospective teachers in order to fill the

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approximately 600 elementary and secondary teaching positions that it has available each year. The current recruitment quota of 600 is necessary to maintain a full compliment of 2,400 teachers. The Bureau's studies of teacher separation rather consistently indicate an annual turnover rate of 23-25 per cent. A large proportion of the annual turnover rate of 23-25 per cent may be attributed to the loss of approximately 41 per cent of the first-year teachers (personal communication from the BIA). Some turnover in a professional staff is normal because of new professional opportunities, promotion, transfers, retirement, death and a number of other intervening factors. The relevant question is what is "normal" turnover and what is "excessive" turnover. Obviously, normal turnover is not an absolute rate but is contingent upon a number of factors such as morale, salary, career patterns, living conditions, organizational structures, and not least of all the supply and demand of teachers in the job marketplace.

The problem of excessive teacher separation is particularly important to the BIA schools whose local conditions require considerable inservice training of new personnel. In nearly every school district, public, federal, or private, however, it is necessary to provide the new teacher with some formal introduction to the local operation. Thus, for the BIA, and for public school districts as well, the problems of recruiting new teachers and of preparing them to work in the local schools represent a major investment. Perhaps more important, the discontinuity endangered by teacher turnover may have a major impact upon the academic progress of students. The success of an educational program is to a large degree contingent upon the competency of the professional staff. An excessively

high rate of turnover usually lessens the efficiency and weakens the cohesiveness of the educational organization, both of which may affect the achievement of the student and the morale of the staff.

PURPOSE

The cost of training new teachers in the BIA schools is very expensive both from an administrative and student point of view, and the concern of the BIA over the poor retention of first-year teachers stimulated the inception of the present study. The project was funded by the U. S. Office of Education on July 1, 1969. The explicit purpose of the project was to study teacher separation among the first-year Bureau of Indian Affairs teaching personnel.

PROBLEM

The problem of the study might be stated as follows: What are the factors contributing to a newly appointed teacher resigning during or following one year of service; or conversely, what are the factors contributing to a newly appointed teacher remaining for a second year of service?

In an attempt to clarify some the terminology used in this study, the following terms and their definitions will be used (NEA Research Bulletin, 1968):

Teacher turnover: Turnover is a very general term and it may refer to a variety of things, such as: movement of teachers in and out of teaching, teachers quitting their jobs, moving from one school to another, entering the profession for the first time or after an interruption.

Teacher separation: Separation refers to a teacher leaving a specific school regardless of the cause or where the teacher's destination.

Teacher mobility: Mobility refers to teachers who are geographically mobile but continue to be educators.

Teacher loss: This refers to teachers who leave the teaching profession.

The project was designed to be exploratory in nature, therefore no specific hypotheses were made. The research literature was consulted, however, in order to provide direction to the research and an explanatory framework for the results.

RESEARCH LITERATURE

The research literature on teacher turnover, loss, mobility and separation as well as on retention reveals that the problem of teacher mobility and retention is not a "new" problem. It seems, however, that until the last decade teachers were supposed to go into their classrooms following graduation from an appropriate institution of higher education and not emerge again until they were ready for retirement. The questions regarding teacher morale, job satisfaction, teacher productivity, teacher mobility, or teachers leaving the teaching field were seldom raised. It is probably safe to assume that teachers of twenty years ago and teachers of today seldom go off to their classrooms and happily devote their lives to the education of their students. It is much more realistic to realize that some teachers move from school to school in a form of horizontal mobility. Other teachers are involved in a vertical mobility that requires moving out of the classroom and into more financially rewarding educational professions (e.g. guidance and administration). Other teachers leave the

teaching profession after only a few years in the classroom, some of these return after they have raised their families but many of the men never return.

There are a number of approaches that can be taken in summarizing the relevant literature on teacher separation and retention. The first and most direct way is to simply list those factors that have been shown to relate to the problem. Nelson and Thompson (1963) provide a list of the factors that influence teachers to leave their classrooms after one year of teaching. The factors are: (1) Salary, (2) Teaching loads, (3) Assignments beyond regular classroom teaching, (4) Inadequate supervision, (5) Poor teaching assignments, (6) Discipline problems, (7) Pressure groups, (8) Poor mental hygiene, (9) Marriage, (10) Inadequate preparation of major or minor field of study or knowledge of subject, (11) Inability to handle classes, (12) Teacher evaluation, (13) Inadequate facilities, (14) Poor faculty relationships, (15) Lack of opportunity to develop new ideas, (16) Routine clerical duties, (17) Competition between schools and industry for trained personnel, (18) Poor school boards, and (19) Health. It is obvious from the preceeding list of factors that teacher mobility is a multifaceted problem. The nineteen factors that contribute to first-year teachers' resignations might just as easily be reconceptualized as factors underlying the following aspects of a teaching position: recruitment, teacher's personality, children in the classroom, administration, school system, geographic locale, job market, and ecological factors (unique combinations of the above factors that cause the behavioral setting to take on different meanings, Barker, 1968).

A second way to summarize the research literature is to take a theoretical orientation and to depend upon the major theories in the field to summarize the relevant literature. In the area of work motivation Herzberg,

Mausner, and Snyderman (1959) have made some of the major contributions. Herzberg suggested those factors associated with job satisfaction (satisfiers) are generally associated directly or indirectly with job activities such as: achievement, recognition, the work itself, responsibilities, and advancement. The factors associated with job dissatisfactions (dissatisfiers) are usually extrinsic to the work itself and are primarily associated with the job context rather than the job activities. Examples of dissatisfiers would be institutional or organization policy and administration, supervision, interpersonal relations, and working conditions. Using Maslow's (1954) hierarchy of needs as a reference Herzberg indicated the satisfier factors (those associated with the job activities) serve the individual's need to use an occupation to further personal growth (self-esteem and self-actualization). On the other hand, the dissatisfier factors (those associated with the job condition's) operate as a supporting base for the satisfier factors (provide the lower needs). The dissatisfier factors may not bring about positive satisfaction but they can operate to prevent dissatisfaction.

Simply dichotomizing the factors in the work situation into satisfiers and dissatisfiers does not provide an adequate explanation of why individuals are satisfied or dissatisfied because it ignores individual differences. Herzberg attempts to account for the personal characteristics of individuals by referring to "motivation seekers" and "maintenance seekers." The motivation seekers are individuals who are primarily motivated by the satisfier factors such as responsibility, achievement, advancement and other job related activities. The maintenance seekers, on the other hand, tend to be more motivated by the factors associated with the job context such as working conditions, pay, supervision and policy.

When Herzberg's theory is summarized, two factors associated with

the job emerge (satisfiers, dissatisfiers) and two factors associated with personality characteristics emerge (motivation seekers, maintenance seekers). Herzberg's theory will be used in a heuristic way to assist in interpreting the results.

Another approach to teacher mobility and retention is through the career patterns of male and female teachers. Charters (1967) has been involved with research dealing with teacher mobility and summarized the career patterns of male and female teachers quite well.

> "The female has made up her mind to become a teacher before leaving high school; she obtains a bachelor's degree and immediately takes her first teaching job. If not already married, she marries soon and continues in her first position for two, three, or four years, then she leaves the position to bear and raise children. She is now in her middle 20's. When her last child is old enough to go to kindergarten--ten or fifteen years later--she may return to classroom teaching. If she does return, the odds are strong that she will remain in teaching, and teach in the same school system, until she reaches retirement age.
>
> Male teachers decide to enter their field sometime after high school graduation and are older than females by the time they are ready to take their first job. They remain in classroom teaching for a longer period of time than their female counterparts, possibly changing schools once. In the meantime, they work at jobs outside public education after school hours and during the summer. When they are in their 30's, male teachers swarm out of classroom teaching either into non-public school occupations or, for a smaller number, into school administration. They never return to the classroom.
>
> Those are the dominant career patterns for men and women. They describe anywhere from 60 to 75 per cent of the persons entering public education at mid-century." p. 184.

In an attempt to explain some of the factors underlying the dominant career patterns of men and women teachers Carters offers the following explanation.

> "The career pattern for women, I believe, will be understood in terms of the cultural and subcultural norms of society; the career pattern for men, in terms of conventional economic forces." p. 186.

In clarifying what he means by dominant career patterns and deviations from them Charters continued:

> "The problem of understanding why individuals deviate from the prevailing patterns involves another approach. For this we need to consider such matters as the person's motives and attitudes, his socializing experiences, the peculiarities of his location within the social and economic system, and the unusual pushes and pulls he feels from his friends, colleagues, and the circumstances of work. The conceptual apparatus for explaining individual deviations is a microscopic, social-psychological one; and the research methods are the ones already in use by educational investigators--the questionnaire and interview and small-scale social analysis." p. 185.

Charters' conceptualization of teacher separation in terms of the dominant career patterns and deviations from it provides an excellent research framework. The present study utilizes Charters' framework and conforms to many of his suggestions. In the results and discussion sections of this report the findings of this study will be related to the dominant career patterns of male and female teachers. Obviously, dominant career patterns do not account for all of the teacher mobility, so the present study employed interviews and questionnaires in an attempt to assess the unique factors that exist within a teacher's environment that contribute to teacher separation.

METHOD

The present investigation was an exploratory study whose purpose was to isolate some of the factors related to the separation and retention of first-year teachers in the BIA schools. The general methodology employed involved interviewing and administering questionnaires to groups of first-year teachers before they began teaching and re-interviewing and re-administering the questionnaires during the latter part of the school year. The

pretest and posttest data along with some demographic data was used in comparing those teachers who resigned during the first year or at the end of the first year with those who remained for a second year.

Comparison Groups. The sample for this study consisted of two groups of schools.

1. The BIA schools serving the Navaho Indians in northern Arizona, New Mexico, and Colorado (Gallup area).

2. The BIA schools serving the Sioux Indians in North and South Dakota (Aberdeen area).

In the 1969-70 school year the BIA hired two hundred ninety-five new teachers for the Gallup area and sixty-six new teachers for the Aberdeen area. Seventy-eight new teachers were selected for study from the Gallup area and forty-nine new teachers from the Aberdeen area were selected for study. In the Gallup area seventy-four additional first-year teachers were given the pre-questionnaire even though they were not in the sample interview. The Aberdeen area sample represents almost all the first-year teachers that attended the pre-service week at Wahpeton, North Dakota, during August, 1969. The Gallup area sample is a random sample chosen from the list of registrants that attended the pre-service week at Ft. Windgate in August, 1969. (See Figure 1 for the geographic areas represented by Gallup and Aberdeen).

The individuals selected to be in the comparison groups were the ones that were interviewed and completed questionnaires during the 1969-70 school year. These two groups (Gallup, Aberdeen) were each divided into two sub-comparison groups on the basis of those teachers who resigned during or after one year of teaching and those who remained for a second year. So, for the purpose of analysis the following comparison groups

Figure 1. Taken from Statistics Concerning Indian Education, 1968, United States Department of the Interior, Bureau of Indian Affairs, Division of Education, Publications Service, Haskell Institute, Lawrence, Kansas.

were used: Gallup: Comparison Group 1, those who remained for a second year; Comparison Group 2, those who resigned during or after one year of teaching; Aberdeen: Comparison Group 3, those who remained for a second year; Comparison Group 4, those who resigned during or after one year of teaching.

Data Collection Instruments. The major instruments utilized in the collection of data on the first year teachers were a framed interview and a questionnaire. Secondary sources of data on the first-year teachers were: personnel records, supervisors ratings, and telephone interviews. A written and pictoral description was also made of all the BIA schools and communities visited by the research assistants.

The pre-interview was designed to elicit information on the following topics: 1. expectations of position, 2. expectations of student relationships, 3. expectations of teacher-supervisor relationships, 4. expectations of community setting, 5. professional expectations, 6. professional activities, 7. quality of training. The post-interview covered the same topics but was reworded slightly.

The pre and post questionnaires contained 87 items dealing with the major topics of: role of the classroom teacher, perception of teaching, supervisory staff, working conditions, social and cultural conditions near the school, professional training as a teacher, recruitment of that person, orientation to the BIA schools. Each of the 87 items were responded to in terms of "what exists" and "what should exist" for that particular item. The discrepancy between "what exists" and "what should exist" on each of the items served as a measure of the potential dissonance for the individual.

The personnel records came from a variety of sources and provided information such as: type of school attended, age, and position with the BIA. The opinion of some of the first-year teachers' supervisors was obtained during the latter part of the school year on a one page supervisor's rating form. Some of the first-year teachers who resigned following their first year of service were contacted by phone and briefly interviewed.

Procedure. Work on the Teacher Mobility and Retention Study began in July, 1969. The initial data gathering activities were conducted during August, 1969. Interview teams were sent to Wahpeton, North Dakota, and Gallup, New Mexico, to interview a sample of teachers preparing to teach for the first time for the BIA. During the one-week orientations the two samples (Aberdeen and Gallup) were interviewed and given a teacher questionnaire referred to as the "Teacher Mobility and Retention Questionnaire."

During December, 1969, a second questionnaire identical to the one administered in August was sent to the North Dakota and New Mexico samples. The return on the questionnaire was fair, but we were unable to locate some of the teachers because they had been transferred, resigned, or chose not to return the questionnaire.

The second major data collection took place March 21-27, 1970. Two interview teams were sent out--one to the Gallup area and another to the Aberdeen area. Letters were sent to the teachers in the two samples prior to the interview teams' arrival; however, this did not preclude our being unable to interview many of the teachers in our original August sample. The interviewers reinterviewed the available teachers in the samples and had the teachers fill out the "Teacher Mobility and Retention Questionnaire."

During this time each teacher's supervisor was given a supervisor's rating sheet and asked to evaluate the teacher.

The research staff received from the Gallup and Aberdeen offices a list of the first-year teachers who terminated their appointments with the BIA during the 1969-70 school year. The individuals on these lists served as the criterion comparison group against which comparisons were made to those first-year teachers who remained with the BIA for a second year of employment.

Many of the individuals who resigned were contacted during October and briefly interviewed over the telephone as to their final reasons for terminating employment with the BIA.

The two criterion groups of first-year teachers that was established (those who resigned from the BIA during their first year--and those who remained for a second year of service) served as the basis for most of the analyses.

RESULTS

The project on which this paper is based terminated January 1, 1971. The data collected during the study is presently in many different stages of analysis. The findings reported in this section of the paper represent the results of some of the preliminary analyses and should not be considered as conclusive. The complete data analysis is to be completed by March 1, 1971, and the complete results of the study will be available at that time. This paper focuses primarily upon the questionnaire (Teacher Mobility and Retention Questionnaire) employed in the project and upon some of the demographic characteristics of the teachers in the study.

In the school year 1969-70 the BIA hired 510 new teachers and 183 of these resigned during or after one year of service. Table I provides a summary of those who resigned and those who remained for a second year of service. It should be noted that 36 per cent of the first-year teachers resigned and that this is slightly less than the 40-41 per cent teacher separation that the BIA has experienced in the past. The Aberdeen and Gallup areas were the focus of concern for the present study and the percentage of teachers resigning from these two areas (Gallup 35 per cent and Aberdeen 33 per cent) do not differ greatly from the national percentage of 37 per cent.

The percentage of resignations by area of assignment and sex of the teacher is displayed in Table II. Of the 510 teachers hired by the BIA in 1969-70 there were 210 men and 300 women, this represents 41 per cent (male) and 59 per cent (female) of the total sample. During or after the first year of teaching 68 (32 per cent) of the men resigned and 142 (68 per cent) remained for a second year. Of the 300 women teachers 115 (38 per cent) resigned and 185 (62 per cent) remained for a second year of service. A Z test for proportions was performed comparing male and female teachers on the basis of whether they had resigned or remained for a second year of service. The Z test was not significant ($p < .05$) but did approach significance at the $p < .10$ level. The trend toward more women resigning than men is consistent with the findings of other studies (Pederson, 1970; Charters, 1970).

Questionnaire. The "Teacher Mobility and Retention Questionnaire" was given to the first-year teachers in the Gallup and Aberdeen areas in August and December of 1969 and March of 1970. The questionnaire contained items relating to the following topics: role of the classroom teacher,

TABLE I

NUMBER AND PERCENTAGE OF RESIGNATIONS
OF FIRST-YEAR TEACHERS BY AREA OF
ASSIGNMENT

Area	Remaining for a Second Year		Resigned during or after one year		Total Number Hired
	Number	Per Cent	Number	Per Cent	
Aberdeen (North and South Dakota)	42	67	24	33	66
Gallup (New Mexico and Arizona)	192	65	103	35	295
Juneau (Alaska)	80	62	49	38	129
Other Areas	13	65	7	35	20
TOTAL	327	64	183	36	510

TABLE II

NUMBER AND PERCENTAGE OF RESIGNATIONS
OF FIRST-YEAR TEACHERS BY SEX AND
AREA OF ASSIGNMENT

Area Assignment	Remained for a Second Year						Resigned During or After One Year						Total Number Hired
	Male		Female		Total		Male		Female		Total		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Aberdeen (North and South Dakota)	15	36	27	64	42	100	9	38	15	62	24	100	66
Gallup (New Mexico and Arizona)	79	41	113	59	192	100	34	33	69	67	103	100	295
Juneau (Alaska)	44	55	36	45	80	100	24	49	25	51	49	100	129
Other Areas	4	31	9	69	13	100	1	14	6	86	7	100	20
TOTAL	142	43	185	57	327	100	68	37	115	63	183	100	510

perception of teaching, supervisory staff, working conditions, social and cultural conditions, professional training, recruitment procedure, orientation to BIA schools. The format of the questionnaire is unique, in that a teacher has to respond to each item in terms of "what exists" and "what should exist." On each questionnaire item a five-point scale is provided for responding to "what exists" and a five-point scale is provided for responding to "what should exist." The questionnaire data can be analyzed in terms of the exists scores, should exists scores or the discrepancy scores (difference between exists and what should exists).

Factor analysis. A principle components factor analysis was performed on the August (Q1) and December (Q2) questionnaires. Four separate factor analyses were conducted. One factor analysis was performed on the "exists" scores and another factor analysis was performed on the "should exist" scores for both Q1 and Q2. The August questionnaire (Q1) N=199 yielded ten factors for the "what exists" scale and five factors for the "what should exist" scale. The December questionnaire (Q2) N=181 yielded thirteen factors for the "what exists" scale and eight factors for the "what should exist" scale. A comparison of the questionnaire items contained in the four major factors for the "what exists" scales and the two major factors on the "what should exist" scales revealed that the questionnaire items found in the factors in Q1 were also found in the same factors in Q2. The factors resulting from the four factor analyses also closely parallelled the existing headings of the questionnaire. The closest agreement between the questionnaire headings and the factors occurred on the following headings: supervisory staff, social and cultural conditions near the school, professional training as a teacher, recruitment procedure, orientation to BIA schools. The questionnaire headings that were composed of a number of different factors were the role of the classroom teacher, and perception of teaching.

Means and standard deviations. The means and standard deviations of each of the 87 questionnaire items were obtained for both of the comparison groups (remained, resigned). Table IV (see Appendix) displays the means and standard deviations of the questionnaire items for both the "what exists" and "what should exist" scales for the August questionnaires (Q1). Table V (see Appendix) contained the same information as Table IV but is based on the data from the December questionnaire (Q2). A visual comparison was made between the criterion groups on the bases of their mean values for the "exists" and "should exist" scales for both Q1 and Q2. An asterisk appears beside the questionnaire items that have differing mean values for the comparison groups.

TABLE III

Classification of the Two Criterion Groups (Resigned, Remained) by Means of Multiple Discriminant Function Analyses [1]

Analyses	Resigned who were correctly classified as resigned	Resigned who were incorrectly classified as remained	Remained who were correctly classified as remained	Remained who were incorrectly classified as resigned	Percentage of correct classification (Hits)
1. Q_1 (August) "What Exists" Scales 1-87 N=199	33	18	100	48	67%
2. Q_1 (August) "What Should Exist" Scales 1-87 N=199	34	17	100	48	67%
3. Q_2 (December) "What Exists" Scales 1-87 N=135	23	12	65	35	65%
4. Q_2 (December) "What Should Exist" Scales 1-87 N=135	24	11	69	31	69%

1. Dixon, W. J., Editor, Biomedical Computer Programs, University of California Press, Los Angeles, 1970.

Discriminant function analysis. A multiple discriminant function analysis using the criterion groups of those teachers who remained and those who resigned was conducted using twenty-five of the questionnaire items. The twenty-five items were selected on the basis of their high loadings on the major factors of the August (Q1) and December (Q2) questionnaires. Table III displays the result of the four discriminant function analyses and the percentage of correct classifications. Each of the four analyses indicate that about 67% of the teachers were correctly classified into the criterion groups of resigned and remained on the basis of their responses to the questionnaire items.

DISCUSSION

In order to place the teacher separation and retention problem of the BIA schools into perspective it is necessary to report some national and state statistics.

The December, 1968, NEA Research Bulletin indicates that nationally approximately 15 per cent of the nation's population of public school teachers either move out of the profession or to a different job each year. The Bulletin also reported a survey which attempted to determine some of the differences that existed between those teachers who had been employed in 1965-66 and continued to teach at the same school during 1966-67 and those who were no longer at the same school in 1966-67. Of the teachers that remained in their present school for a second year of service (old-timers) 63 per cent had 5 years or more of teaching experience. Of the teachers who left (short-timers) after teaching 1965-66 and either moved to another school or out of the profession, 58 per cent had less than 5 years of teaching experience and of the short-timers 46 per cent were an average of 25.34 years old. Thus, in terms of the NEA survey it appears that the younger teachers with less experience are more mobile.

A greater understanding of teacher termination and retention may be obtained by considering several studies that have been conducted at the state level. Pederson (1970) found that from 1965-66 to 1966-67 only 80 per cent of Michigan's public school teachers were retained. Four per cent of the mobile teachers migrated to other public school districts, but the other sixteen per cent dropped out of the teaching profession. Pederson found that age was highly related to teacher mobility, in that the younger faculty were more mobile. Sex was also a very important variable in predicting turnover, with young females accounting for a major part of the turnover. Other factors that were related to teacher turnover were:

1. Level of Degree. The acquisition of a graduate degree resulted in higher retention rates for the majority of females and older males, but it appeared to accelerate an exodus from the profession by younger teachers and young middle-aged men.

2. Institutional Training. School systems that employed large numbers of teachers from the higher status Michigan universities and colleges experienced high retention rates.

3. Training. School systems which had a large number of personnel with minimal levels of educational preparation had a higher rate of turnover.

4. School Location and Size. School systems in urban areas experience greater teacher retention.

A study conducted in Oklahoma by the Oklahoma Public School Research Council (1970) focused on "Mobility in the Education Profession." In general, the study found that younger females were the poorest risks for long-term employment.

Whitener (1965) studied teacher survival in the St. Louis area and found that by the end of the fifth year of teaching, 80% of the entering teachers were gone. She made the point that this attrition rate was heavily influenced by the personal attributes of age and sex and that an administrator could reduce teacher turnover simply by hiring older teachers, and especially avoiding young female teachers.

A recent study of teacher turnover was conducted in Oregon by W. W. Charters (1970) and offers in addition to some interesting results a lucid approach and interpretation of the factors affecting teacher survival. Charters found that two personal attributes--age and sex--were the factors which correlated most strongly with job survival. Items such as community conditions, supervisory practices, work conditions, salary levels, etc., were not found to be correlated with turnover. Some of Charters more pertinent conclusions are:

1. Males have a longer survival rate than females (4 out of 10 males remained in one district 5 years or more with only 3 out of 10 females remaining in the same district).

2. Age at time of employment is strongly related to the female survival rate but only weakly to the male survival rate.

3. School district size is directly related to survival of males but indirectly related to survival of females.

4. Neither teaching level or amount of experience (with age, sex held contrast) was related to survival rate.

5. Found what they termed a "survival effect" which occurs sometime during the fifth year. It is proposed that teachers develop an "Investment" in their district over a period of time and this is a very important item in determining the survival rate. It is interesting to note that after four years of teaching only 40 per cent of the males and 30 per cent of

the females remained for a fifth year. In fact, after the first year of teaching only 80 per cent of the men and 65 per cent of the women remained for a second year of teaching. The Oregon data only confirms the trend in the other national and state data reported which suggests a teacher turnover of around 15-25 per cent.

The preceeding literature suggests that the poorest risk for retention might conform to the following composite: a young single woman with a bachelor's degree, minimal training, no previous experience, located in a small rather isolated school. The question may now be raised regarding the king of teacher population from which the BIA recruits.

In order to maintain a staff of 2,400 the BIA must recruit approximately 600 new employees each year. Of the 600 positions available approximately 60 per cent are for Elementary Teachers, 15 per cent for Guidance Counselors, 15 per cent for Secondary Teachers, and 10 per cent for Training Instructors (Kindergarten). The greatest number of individuals recruited will be working in grades K-8, approximately 75-85 per cent, since many of the Guidance Counselors work with children K-8.

The responsibility for recruiting is divided between two groups, the Teacher Recruitment Unit and the Interagency Board of U. S. Civil Service Examiners. The Interagency Board receives and reviews applications from individuals who are interested in teaching at the Secondary and/or Post High School level. The Interagency Board is responsible for recruiting less than 100 (about 15 per cent of the total annual recruitment) new teachers each year. The Interagency Board usually has an abundance of applicants from which to choose and in view of the present growing teacher surplus they should have ample applicants in the future. The Teacher

Recruitment Unit is responsible for recruiting Elementary Teachers and Guidance Counselors. The responsibility of the Teacher Recruitment Unit is rather large since they recruit 450-500 new teachers each year (approximately 75-85 per cent of the total annual recruitment).

The Teacher Recruitment Unit of the BIA relies upon campus interviews as its main means of recruiting and therefore contacts mostly new college graduates. Since 75-85 per cent of the first-year teachers must work at the elementary level that usually means recruiting females. Recruiting females from a population of new college graduates means that most of them are either single or just newly married. The BIA first-year teacher usually has a bachelor's degree, minimal training for working with Indian children, and no previous teaching experience. The young girls are then placed in a small remote BIA school.

The BIA schools overall teacher turnover of 23-25 per cent and 36-41 per cent for first-year teachers should not be surprising because it appears that they are recruiting from a high risk population and then placing their recruits in a high risk environment. Thus, one way of improving morale and preventing poor performance or separation is to recruit from a population that has characteristics that are compatible with the work setting. Another way to maintain morale is to reduce the dissonance that exists in the employee's minds between "what exists" and "what should exist" in the work situation and the factors related to the work situation.

Appendix

TABLE VI

Questionnaire Items on Which the

Comparison Groups Differed (QI - August)

Does exist to:	Should exist to:
1. Very high degree	1. Very high degree
2. High degree	2. High degree
3. Moderate degree	3. Moderate degree
4. Low degree	4. Low degree
5. No appreciable degree	5. No appreciable degree

5 When the teacher makes an administrative decision concerning a pupil, the administration supports that decision.	6 a teacher makes minor repairs of classroom equipment.
	21 school prepares students to function adequately in our society.
22 teachers holding an academic degree are better prepared to teach than persons not holding such a degree	22 teachers holding an academic degree are better prepared to teach than persons not holding such a degree.
25 I see the teaching process changing as students ask for greater relevance.	25 I see the teaching process changing as students ask for greater relevance.
31 I have received a clear understanding of the goals and objectives of my school.	32 I have been able to turn to them for assistance in solving some of the student problems that I encounter.
34 they respect my teaching ability and allow me a great deal of initiative.	39 the in-service training programs were well received by the teachers.
71 I was aware of the working conditions in the bureau schools before I accepted my position.	57 I am able to continue my professional education at a nearby college or university.
74 the recruitment literature utilized by BIA was very effective in portraying a realistic view of my school location and my professional duties.	59 I knew my subject matter quite well.
	69 I had a choice of school assignments at the time I was recruited and believe every effort was made to assign me to that location.
	70 I was aware of the isolation factors of my school location before accepting the position.
	72 the conditions I encountered were very much like those explained to me by the recruiter.
	75 I understood the steps in filling out the various forms and knew what to expect in terms of the time it would take to process the forms.

TABLE VII

Questionnaire Items on Which the

Comparison Groups Differ (QII - December)

Does exist to:	Should exist to:
1. Very high degree	1. Very high degree
2. High degree	2. High degree
3. Moderate degree	3. Moderate degree
4. Low degree	4. Low degree
5. No appreciable degree	5. No appreciable degree

9 teachers often make administrative decisions that affect their own class	6 a teacher makes minor repairs of classroom equipment.
26 school is really nothing more than a daycare center for some of the older children.	46 I have adequate equipment and supplies for carrying out my teaching assignment.
53 there are enough social activities connected with the school so I am able to participate with the other teachers in social function.	
61 I had developed the type of personality that fits into the classroom situation.	
67 the person who recruited me was very enthusiastic about the bureau's educational system.	
80 I understood the tribal organization.	
83 I understood the organization of the BIA and how education fit into the bureau's organizational structure.	
86 I understood the community in which I would be living and working.	

TABLE IV

MEANS AND STANDARD DEVIATIONS ON THE "WHAT EXISTS" AND "WHAT SHOULD EXISTS" SCALES ON QUESTIONNAIRE I FOR THE TWO COMPARISON GROUPS

	What Exists				What Should Exist			
	Resigned N=51		Remained N=148		Resigned N=51		Remained N=148	
NO	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	3.0588	0.9468	3.0138	0.8659	2.1176	1.1427	2.0000	0.9824
2	3.1765	0.7129	3.0215	0.9591	2.0784	0.8909	2.0277	1.0306
3	3.1200	1.0029	2.8992	0.9802	3.0196	1.0098	3.1096	1.0179
4	2.7600	1.0797	2.5673	0.9126	1.7551	0.8044	1.8055	0.8632
5**	2.4706	1.0267	2.8264	1.0196	3.8823	0.9088	3.7365	1.0126
6**	2.4200	0.8352	2.4748	0.8874	2.3000	0.8144	2.5918	1.0452
7	3.0392	1.2484	3.1586	1.1647	1.7843	1.0063	1.7415	1.0474
8	3.2200	1.0554	3.1862	1.0273	2.3137	1.2081	2.1959	1.0213
9	2.9200	1.1925	2.9514	1.1425	3.6274	0.7736	3.4558	0.8854
10	2.9412	1.1386	2.8958	0.9875	1.7200	0.7010	1.7639	0.8608
11	2.3000	0.9742	2.4652	1.1089	1.3725	0.6917	1.6598	1.0034
12	2.3800	0.8303	2.4195	0.8673	1.7647	0.8623	1.8707	0.9011
13	1.9804	0.9271	2.0563	1.0503	2.2200	0.8873	2.4041	1.0277
14	2.4400	0.9293	2.4138	0.9471	1.8823	0.8402	1.9728	0.9359
15	2.8163	0.8821	2.6853	0.9225	1.8039	0.8005	1.8979	0.9417
16	2.7000	1.0152	2.7034	0.9583	3.8823	1.1251	3.7162	1.3043
17	2.6400	1.1386	2.4315	1.0299	4.1000	1.0351	3.9594	1.0996
18	3.4400	1.2480	3.2978	1.0872	1.5882	0.8044	1.8414	1.0845
19	3.1000	1.0738	3.0890	1.0166	2.5490	1.2540	2.4207	1.2946
20	3.4000	1.0498	3.2152	0.8541	2.9600	1.2282	2.9503	1.2497
21*	2.8235	1.2281	2.6575	1.1292	3.2549	1.3243	3.7483	1.1518
22*	3.3265	1.0080	3.0791	1.1168	1.6274	0.7200	1.9383	0.9629
23	2.8400	0.9553	3.0411	1.0230	4.5882	0.7791	4.3862	1.1004
24	2.9600	0.9681	2.8125	0.8191	2.2941	0.9443	2.2569	0.9293
25*	3.0800	1.1036	3.4166	1.1677	1.2353	0.4284	1.5170	0.8629
26	3.0600	0.9127	3.0352	0.9024	1.4902	0.7035	1.5764	0.8327
27	2.5208	1.0516	2.6482	1.0510	1.3921	0.6026	1.5774	0.8859
28	2.6531	1.0907	2.6474	1.0416	1.3333	0.5538	1.5959	0.9583
29	2.7083	1.1843	2.6714	1.0825	1.3921	0.6349	1.6293	0.9396
30	3.1400	1.3250	3.0620	1.1915	1.6531	0.8304	1.7234	0.9644
31	*2.4444	0.9898	2.7368	1.1139	1.3921	0.6026	1.5815	0.8877
32	*2.4545	1.1093	2.6691	1.0958	1.6800	0.7407	2.1357	1.0122
33	2.3778	1.0289	2.5379	1.0586	1.4200	0.6728	1.6620	0.8992
34	*2.3778	0.9603	2.7710	0.9889	1.5294	0.7577	1.7465	0.9158
35	2.2826	1.0036	2.5395	1.0444	1.5510	0.6789	1.8227	0.9804
36	2.4130	0.9563	2.6408	1.0059	1.5417	0.6829	1.8059	0.8712
37	3.0227	1.1307	2.9477	1.0500	2.6863	1.1915	2.7042	1.2192
38	2.6591	1.0103	2.8661	0.9289	3.7708	1.1530	3.8510	1.1080
39	*2.6170	0.9902	2.8309	0.9472	1.7600	0.9161	2.0416	1.0503
40	3.0000	1.1421	2.9313	1.2038	1.3200	0.5511	1.5442	0.8539
41	2.7551	1.2671	2.6338	1.1879	1.3800	0.6024	1.5959	0.8597
42	2.5102	1.1748	2.7500	1.1677	1.3400	0.6581	1.5714	0.9216
43	2.4889	1.0579	2.4822	0.9681	1.3191	0.5153	1.5314	0.8624
44	2.9792	1.1202	3.0000	1.1832	1.5957	0.9007	1.7029	0.8747
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3469	0.5609	[illegible]	[illegible]

TABLE IV CONTINUED

MEANS AND STANDARD DEVIATIONS ON THE "WHAT EXISTS" AND "WHAT SHOULD EXISTS" SCALES ON QUESTIONNAIRE I FOR THE TWO COMPARISON GROUPS

	What Exists				What Should Exist			
	Resigned N=51		Remained N=148		Resigned N=51		Remained N=148	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
46	2.9302	1.1422	3.1518	1.0561	1.5306	0.6488	1.6851	0.8592
47	2.0816	1.3203	2.2671	1.3250	1.5000	0.6776	1.6041	0.8627
48	2.2826	0.9348	2.2465	0.9978				
49	2.2553	1.1125	2.2535	1.0275				
54	3.2708	1.1622	3.3404	1.0612	1.8980	0.7429	2.1468	0.9783
55	3.1458	1.1483	3.1241	1.2354	1.8723	0.7407	2.0827	0.9465
56	2.9362	1.1685	3.0285	1.0590	1.8125	0.7043	1.9861	0.8361
57*	2.8979	1.0848	2.9655	1.2100	1.9184	0.7313	2.2365	0.9502
58	3.4583	1.3040	3.3916	1.3164	1.7551	0.6624	1.9794	1.0067
59*	2.9362	1.1307	3.0137	1.0890	1.7143	0.6124	2.0204	0.9398
60	2.2600	0.9216	2.3904	1.0128	1.4600	0.5789	1.5918	0.8661
61	2.5200	0.9089	2.4276	0.9483	1.4800	0.6465	1.7006	0.9022
62	2.3061	0.7417	2.3241	0.8570	1.5714	0.6770	1.6734	0.9003
63	2.6000	1.2122	2.5890	1.1367	1.5200	0.7068	1.6643	0.9268
64	2.9600	1.3395	2.9189	1.2858	1.5200	0.6773	1.6758	0.8888
65	2.0816	0.9539	2.2986	0.9167	1.3877	0.5707	1.6713	0.8540
66	2.4375	0.9655	2.3472	0.8389	1.4792	0.5831	1.6041	0.7864
67	2.0000	1.0690	2.2876	1.1505	2.3469	0.9026	2.3426	1.0353
68	2.1276	1.1725	2.0601	1.0924	1.7234	0.7431	1.7629	0.9558
69*	3.7755	1.5447	3.6938	1.4833	1.8979	0.9841	2.3379	1.1620
70*	3.4375	1.6231	3.4657	1.4440	1.8958	1.0156	2.2394	1.2142
71*	2.0800	1.2911	2.1986	1.3727	1.4400	0.7329	1.6389	0.9207
72*	2.9800	1.3323	2.9251	1.3553	1.4200	0.6728	1.7241	0.9316
73	2.8261	1.1412	2.8666	1.2975	1.6304	0.7105	1.7591	0.9036
74*	1.9362	1.1307	2.3154	1.2328	1.4468	0.6188	1.7077	0.9017
75*	3.0625	1.2447	3.1267	1.1352	1.4792	0.6520	1.8071	0.9513
76	3.2245	1.3427	3.1468	1.2274	1.5510	0.6789	1.8028	0.9244
77	3.3265	1.2481	3.2014	1.2492	1.6939	0.8945	1.8369	0.9608
78	3.1837	1.2529	2.9436	1.3878	1.5306	0.6488	1.7305	0.8773
79	2.6939	1.1938	2.8194	1.2213	1.6326	0.7273	1.7482	0.9305
80	3.1428	1.2748	2.9930	1.2147	1.5510	0.6145	1.7202	0.8992
81	3.0204	1.0702	3.0277	1.1278	1.6122	0.7308	1.8541	0.9532
82	3.1087	1.1781	3.0902	1.0769	1.5208	0.7143	1.7708	0.9660
83	2.9375	1.0398	2.8391	1.0322	1.5918	0.7047	1.7708	0.9660
84	2.8800	0.9823	2.8380	1.0220	1.7800	0.7083	1.9290	0.9384
85	2.4200	1.0708	2.6084	1.0211	1.4600	0.7343	1.6923	0.9585
86	2.0000	1.1066	1.8461	1.0022	1.4600	0.6131	1.5555	0.8002
87	3.0200	0.9998	2.8671	1.1703	1.5000	0.6145	1.7394	0.8224

TABLE V

MEANS AND STANDARD DEVIATIONS ON THE "WHAT EXISTS" AND "WHAT SHOULD EXISTS" SCALES ON QUESTIONNAIRE II FOR THE TWO COMPARISON GROUPS

	What Exists				What Should Exist			
	Resigned N=35		Remained N=100		Resigned N=35		Remained N=100	
NO	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	3.3143	1.1574	3.2525	1.2317	2.0882	0.9001	1.8990	0.8511
2 *	3.2353	1.5187	3.1562	1.2081	2.2941	1.1154	2.0721	1.0026
3 *	3.0000	1.3484	3.0909	1.1437	1.8235	0.9365	1.9081	0.8862
4	2.6857	1.3454	2.8421	1.1422	1.9429	1.0556	1.8469	0.9121
5	2.7143	1.2265	2.8687	1.1397	3.3428	0.9056	3.4646	0.9510
6	2.2000	1.1061	2.2727	1.1851	1.9714	0.9231	1.6767	0.7932
7	3.1143	1.1054	3.0300	1.2749	3.6286	0.9727	3.8400	0.9290
8	3.3823	1.2064	3.4536	0.9897	2.6765	0.9445	2.4948	0.8181
9	3.7143	1.3189	3.1734	1.3240	1.9143	0.8531	1.8367	0.8210
10	3.6000	1.2880	3.5300	1.1499	2.6286	0.8075	2.4848	0.9188
11	2.4286	1.1704	2.6734	1.0332	3.8286	0.6177	3.6161	0.7243
12	1.9714	0.9544	2.0808	0.9549	1.6286	0.6456	1.6363	0.6301
13	2.1429	1.0331	2.1237	1.1111	1.6857	0.9000	1.5521	0.8690
14	2.3143	0.9933	2.4271	1.0234	1.7059	0.7190	1.7629	0.7876
15	3.1250	0.9419	3.1263	1.0543	2.4375	0.9817	2.6316	1.0320
16	2.7714	1.1137	2.9072	1.0112	2.2000	0.8331	2.1237	0.8810
17	3.2000	1.2078	3.0312	1.1281	2.1143	0.7960	2.2680	0.8602
18	3.8529	1.1840	3.8333	1.1394	3.3823	1.4567	3.5454	1.3723
19	2.7714	1.0870	2.7677	1.1142	3.9143	1.1472	4.1010	0.9948
20	3.5714	1.0371	3.4183	0.8843	1.4857	0.7811	1.6666	0.9583
21	2.8286	1.0428	2.6250	1.1448	2.4000	1.1682	2.2062	1.1720
22	2.4118	0.9883	2.6947	0.8761	2.0588	1.0428	2.2659	0.9965
23	3.0000	0.9211	2.7526	1.0610	3.4571	0.9805	3.4123	1.0969
24	3.1765	1.1927	3.1855	1.1304	1.9412	1.1532	2.0000	1.0308
25	3.1470	1.2585	2.9798	1.3091	4.6176	0.6520	4.5612	0.8003
26 *	3.7059	1.0597	3.3838	1.0272	2.2353	0.8549	2.4141	0.8573
27	2.5882	1.3510	2.7576	1.3783	1.4118	0.6568	1.4848	0.7195
28	2.7647	1.2806	2.8469	1.2951	1.6667	0.8539	1.7143	0.7733
29	3.4412	1.2837	3.3402	1.3608	1.4412	0.6602	1.6082	0.7297
30	2.9706	1.3368	3.2929	1.3267	1.4118	0.8209	1.6428	0.8525
31	2.7059	1.3149	2.8889	1.3084	1.4412	0.6126	1.6969	0.7620
32	3.1471	1.5001	3.1818	1.2806	1.7059	0.9055	1.8081	0.8290
33	2.2647	1.3098	2.3434	1.1443	1.5294	0.7876	1.6464	0.7328
34	2.6471	1.2764	2.7576	1.2129	2.0294	1.0585	2.0707	0.8719
35	2.6471	1.4117	2.7374	1.3139	1.5882	0.8570	1.5979	0.7727
36	2.7353	1.4628	2.6701	1.2806	1.5588	0.6602	1.7347	0.7673
37	3.3823	1.4145	3.4845	1.3159	1.8788	0.9604	1.8969	0.7703
38	3.5312	1.1635	3.4687	1.1872	1.9062	0.8175	2.0737	0.8536
39	2.7714	1.1653	2.9794	1.0702	2.9429	1.3048	3.2210	1.2392
40	3.4412	1.2356	3.2737	1.2415	4.2059	1.0380	3.9473	1.0854
41	3.0294	1.2182	3.0510	1.2131	1.8571	0.9121	1.8556	0.9241
42	3.3714	1.0314	3.2600	1.1774	1.4000	0.7746	1.6500	0.8087
43	3.0294	1.3593	3.1111	1.1508	1.5000	0.7620	1.7475	0.7869
44	3.2857	1.4053	3.2929	1.2718	1.4286	0.8148	1.5757	0.7572
45							1.5300	0.7582

TABLE V CONTINUED

MEANS AND STANDARD DEVIATIONS ON THE "WHAT EXISTS" AND "WHAT SHOULD EXISTS" SCALES ON QUESTIONNAIRE II FOR THE TWO COMPARISON GROUPS

	What Exists				What Should Exist			
	Resigned N=35		Remained N=100		Resigned N=35		Remained N=100	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
46*	3.4571	1.4821	3.7083	1.1231	1.6857	0.9000	1.9791	0.9622
47	2.0294	1.2182	2.2828	1.1784	1.6176	0.8170	1.7374	0.8155
48	2.5143	1.0947	2.3163	1.1178	1.6857	0.6761	1.8469	0.7371
49	2.7714	1.3522	2.5353	1.2148	1.8286	0.8907	1.9091	0.8341
50	2.6286	1.1903	2.5656	1.2385	1.9429	0.9684	1.8485	0.7872
51	3.2000	1.3460	3.2600	1.2603	1.8857	0.7960	1.9300	0.7688
52	3.7428	1.1966	3.4747	1.1280	2.3235	0.9119	2.3535	0.8842
53*	3.5312	1.2439	3.1414	1.2618	1.9697	0.8472	2.1515	0.8252
54	3.0588	1.0714	3.3030	1.1558	2.1176	0.9775	2.2525	0.8372
55	3.2353	1.3040	3.4400	1.2253	2.0606	0.8638	2.0707	0.7458
56	3.4706	1.2610	3.4949	1.2566	2.0000	0.9211	1.9800	0.8285
57	3.4118	1.0185	3.2727	1.0284	2.0588	0.8856	2.0505	0.8002
58	2.4000	1.0347	2.4100	1.0259	1.8000	0.7971	1.7100	0.7560
59	2.5294	0.9919	2.4100	0.9959	1.7714	0.8075	1.7200	0.7259
60	2.5714	1.0371	2.7222	0.7897	1.7714	0.8774	1.7070	0.7458
61*	2.8857	1.2549	2.5300	1.1322	1.7428	0.9185	1.6600	0.6849
62	3.3428	1.4741	3.1200	1.2575	1.8286	0.9849	1.8400	0.7067
63	2.4000	0.9456	2.2500	0.8087	1.7428	0.7005	1.7000	0.6742
64	2.5714	0.9482	2.4141	0.8208	1.7143	0.7101	1.7200	0.6975
65	2.0571	1.1617	1.9899	1.1111	2.5143	1.0947	2.3505	0.9133
66	1.9643	0.7445	2.2184	1.1756	1.9310	0.7987	1.9647	0.8924
67*	3.5143	1.7213	3.8384	1.4121	2.0571	1.0556	2.1515	0.9935
68	3.5000	1.6002	3.6122	1.3594	1.9706	1.0294	2.1237	0.9383
69	2.4706	1.3537	2.3737	1.2583	1.6176	0.8533	1.6161	0.7520
70	3.5714	1.2435	3.4040	1.1945	1.6000	0.8117	1.7143	0.7733
71	3.5000	1.1963	3.5275	1.2233	1.7419	0.8932	1.7935	0.8456
72	2.1111	0.9740	2.4000	1.1568	1.6429	0.6215	1.8117	0.8930
73	3.5151	1.1758	3.5000	0.9514	1.7647	0.8549	1.7604	0.7913
74	3.3428	1.2113	3.3469	1.2108	1.8857	0.9000	1.8571	0.7995
75	3.7143	1.1775	3.4242	1.0981	1.7714	1.0314	1.9091	0.7436
76	3.1176	1.2972	3.1875	1.2675	1.8823	0.8444	1.8350	0.7455
77	2.7714	1.1903	2.9694	1.1880	1.9429	0.8726	1.8673	0.7948
78	3.0857	1.1472	2.9694	1.2053	1.9429	0.8023	1.7245	0.7703
79	3.1143	1.2549	3.0000	0.9689	1.8286	0.9231	1.9192	0.7650
80	*3.2286	1.0025	2.9490	1.0490	1.8823	0.8444	1.9081	0.7876
81	2.9714	0.8907	2.9899	1.0151	1.8000	0.6325	1.9889	0.7810
82	3.3428	0.8382	3.3232	0.9458	1.9143	0.8869	2.0606	0.7931
83	*3.1471	1.0768	2.7653	0.9284	1.8286	0.8570	1.8384	0.7383
84	2.2000	0.9010	2.2828	1.0694	1.6857	0.7960	1.7677	0.7260
85	3.2857	1.0167	3.2727	1.0382	1.8571	0.8793	1.9596	0.7814
86	*2.4286	1.1450	2.8889	1.1684	1.9714	0.9544	2.1212	0.8363
87	2.9143	1.2689	2.6565	1.0218	1.8571	0.9121	1.9596	0.7814

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